

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 August 2005 (04.08.2005)

PCT

(10) International Publication Number
WO 2005/070849 A1

(51) International Patent Classification⁷: **C04B 28/06**

(21) International Application Number:
PCT/EP2004/013737

(22) International Filing Date: 3 December 2004 (03.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0401603.6 26 January 2004 (26.01.2004) GB

(71) Applicant (for all designated States except US): **CONSTRUCTION RESEARCH & TECHNOLOGY GmbH** [DE/DE]; Dr. Albert-Frank-Str. 32, 83308 Trostberg (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KOTHE, Thomas** [DE/CH]; Luegislandstrasse 265/9, CH-8051 Zürich (CH).
OPPLIGER, Max [CH/CH]; Burgfeldermattweg 59, CH-4123 Allschwil (CH).

(74) Common Representative: **CONSTRUCTION RESEARCH & TECHNOLOGY GmbH**; Dr. Albert-Frank-Str. 32, 83308 Trostberg (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SETTABLE MIXTURE CONTAINING LIME, A CEMENTITIOUS COMPOSITION AND A POLYMER

(57) Abstract: The present invention refers to a settable mixture comprising (i) a water absorbing composition and (ii) an aqueous emulsion of organic polymer or (iii) dispersible organic polymer, wherein the water absorbing composition (i) contains inorganic ingredients which are capable to react with water and the water absorbing composition (i) contains at least 13 weight % lime and at least 5 weight % of a cementitious composition of which components form ettringite during the absorption of water and wherein the amount of the aqueous emulsion of organic polymer (ii) in relation to (i) is such as to provide a ratio of combined weight of polymer solids to combined weight of ingredients which are capable to react with water of from 0.5:1 to 10:1, preferably 1:1 to 4:1 and wherein the amount of dispersible organic polymer (iii) in relation to (i) is such as to give a ratio of combined weight of polymers to combined weight of ingredients which are capable to react with water of from 0.5:1 to 10:1, preferably 1:1 to 4:1.



WO 2005/070849 A1